Content of files and folders

Folder structure Analysis:

* Analysis Extended Forward Kinematics Algorithm
* Analysis Impact of General Pelvic Movement
* Analysis Standard Forward Kinematics Algorithm
* Analysis Standard Forward Kinematics Algorithm based on EKM

General Folders for Converting MATLAB Latex:

* dev
* matlab2tikz-1.10
* private

MATLAB scripts general:

* Robot (contains most relevant functions for the CDPR )
* cable\_gravitational\_pull (Analysis of deflection due to gravitational effects)
* comparison\_circle\_box\_method (Comparison of Box Method and Circle Method)
* l\_standardmodel (function, yielding the SKM cable vector)
* m2tInputParser (specific function for converting MATLAB to LATEX)
* matlab2tikz (function converting MATLAB figures to LATEX)
* R\_Kardan (3x3 Rotation matrix)
* tight\_subplot (MATLAB function for tight subplots)
* figure2dot (function for converting MATLAB to LATEX)
* cleanfigure (important for converting MATLAB to LATEX)

MATLAB scripts in folder *Analysis Extended Forward Kinematics Algorithm*

* EKM\_DL\_center\_method (contour plots and analysis)
* EKM\_DL\_box\_method (contour plots and analysis)
* EKM\_DL\_circle\_method (contour plots and analysis)
* EKM\_LM\_center\_method (contour plots and analysis)
* EKM\_LM\_box\_method (contour plots and analysis)
* EKM\_LM\_circle\_method (contour plots and analysis)

MATLAB scripts in folder *Analysis Standard Forward Kinematics Algorithm*

* SKM\_DL\_center\_method (contour plots and analysis)
* SKM\_DL\_box\_method (contour plots and analysis)
* SKM\_DL\_circle\_method (contour plots and analysis)
* SKM\_LM\_center\_method (contour plots and analysis)
* SKM\_LM\_box\_method (contour plots and analysis)
* SKM\_LM\_circle\_method (contour plots and analysis)

MATLAB scripts in folder *Analysis Standard Forward Kinematics Algorithm based on EKM*

* SKM\_DL\_center\_method (contour plots and analysis)
* SKM\_DL\_box\_method (contour plots and analysis)
* SKM\_DL\_circle\_method (contour plots and analysis)
* SKM\_LM\_center\_method (contour plots and analysis)
* SKM\_LM\_box\_method (contour plots and analysis)
* SKM\_LM\_circle\_method (contour plots and analysis)

MATLAB scripts in folder *Analysis Impact of General Pelvic Movement*

* SKM\_DL\_circle\_method\_anterior\_tilt (contour plots and analysis)
* SKM\_DL\_circle\_method\_pelvic\_drop (contour plots and analysis)
* SKM\_DL\_circle\_method\_pelvic\_move (contour plots and analysis (extreme pelvic movements))
* SKM\_DL\_circle\_method\_pelvic\_usual (contour plots and analysis (usual pelvic movements))
* SKM\_DL\_circle\_method\_pelvic\_usual (contour plots and analysis (usual pelvic movements))
* SKM\_DL\_circle\_method\_translation\_z (contour plots and analysis)